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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/312,404	05/14/1999	JOHN MAURICE BIRD	MARSP0114US	2564

7590 12/04/2003

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EXAMINER
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TUGBANG, ANTHONY D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 12/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/312,404

Applicant(s)

BIRD ET AL.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,13-16,24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,6,14 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-3,5,13,15,24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The applicants' amendment filed 9/9/03 (Paper No. 29) has been fully considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102 or 103***

3. Claims 1-3, 5 and 13, 15 and 24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Reese et al 3,136,034.

Reese discloses a method of manufacturing a coil comprising: manufacturing a former (core 44) to form a core former (see col. 2, lines 53+); bending the former into a curved shape by either bending the former around a mandrel 60 (shown in Fig. 5) or alternatively, bending the former with blade 78 (shown in Fig. 6), each to form a curved former (shown in Fig. 2); winding at least one electrical conductor around the curved former after the step of bending (see col. 3, lines 31+).

Being that the claimed "former" is read as core 44, the core 44 is said to be initially manufactured in a substantially flat shape from at least two different aspects. The first being that it would be inherent to have the core 44 in a substantially flat shape prior to bending the core 44 around the mandrel 60. The second being that the core 44 is substantially flat (as shown in Fig. 5) prior to bending the core with a blade 78 (shown in Fig. 6).

Regarding Claims 2, 3 and 13, since the former (core 44) is bent around the mandrel 60, the core can be said to be both “flexible” and “resilient”.

Regarding Claims 5 and 15, after bending, the former (core 44) is secured to other elements (as shown in Fig. 1).

Regarding Claim 24, the former (core 44) of Reese is in either in a flat or substantially flat surface over its entire surface.

If applicants believe that it would not be inherent to have the former (core 44) in a flat shape or substantially flat shape prior to bending the former around mandrel 60, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to initially have manufactured the former (core 44) of Reese from a flat or substantially flat shape to positively allow the former to fit over the mandrel 60 and allow accurate bending.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese et al in view of European Patent EP 0153131, referred to hereinafter as EP'131.

Reese discloses the claimed manufacturing method as previously discussed and further including that material of the former is necessarily non-magnetic (see col. 3, lines 38+). Reese does not mention that the former is made of an electrically insulating material.

EP'131 teaches that formers (sheet 12 in Fig. 1) can be made from an electrically insulating material of plastics, i.e. flexible epoxy fiberglass (see page. 2), that is also considered to be non-magnetic or non-metallic.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Reese by forming the former from an electrically

insulating material, as taught by EP'131, to positively provide a non-magnetic former material that supports wound conductors.

### ***Response to Arguments***

5. Applicant's arguments filed 9/9/03 (Paper No. 29) have been fully considered but they are not persuasive.

In regards to the merits of Reese, the applicants' contend that Reese does not teach manufacturing the former in a flat or substantially flat shape and then bending the former into a curved shape.

The examiner most respectfully disagrees. Prior to bending the former 44 around the mandrel 60, the former has to be in some shape in its entirety other than the shape that is shown in Figure 5. The shape of the former 44 for the various reasons state above, satisfies the limitations that the former has to be in a shape that is "flat or substantially flat" prior to bending. The examiner maintains this position with respect to Reese.

With respect to the motivation of one of ordinary skill in the art in the single reference of Reese et al as this applies to the obvious state of the former prior to bending, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Reese suggests that there is some teaching of having the former in some shape prior to bending the

former (around the mandrel 60). To have the shape of the former in an initial state of being flat or substantially flat shape would otherwise be obvious to one of ordinary skill in the art of bending formers.

***Allowable Subject Matter***

6. Claims 4, 6, 14 and 16 are allowed.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

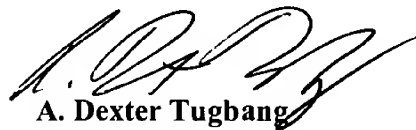
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 9:00 am - 6:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for regular communications and 703-305-3588 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.



**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

adt  
December 2, 2003